

**TRANSPORT
INFRASTRUCTURE AND TRANSPORTATION MEANS**

Metadata

National Bureau of Statistics of the Republic of Moldova (NBS)

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2. Metadata Update

2.1. Last certification of metadata

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2.2. Last update of metadata

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3. Statistical Presentation

3.1. General description

At the different stages of statistical data collecting, generalization, and dissemination process, there is cooperation in different forms with the economic units, institutions involved directly or indirectly in the transport sector so as to produce and disseminate better and more extended statistical data.

Exhaustive statistical surveys specific for every mode of transport – railway, road, air, fluvial, and gas pipelines represent the main tools for determining statistics on: length of public roads, railway lines, and trolleybus lines, inland waterways, and gas pipelines, as well as the transportation means in the enterprises' inventory existing on December 31.

The Public Services Agency presents the data on the number of registered road vehicles existing at the end of the calendar year.

Hence, the exhaustive statistical surveys regarding the length of transportation ways and transportation means registered in the inventory, as well as the administrative data sources are used to collect statistical data meant to ensure the internal and external beneficiaries with statistical information in the area.

3.2. Concepts and definitions

3.2.1. Definitions

Road transport network – totality of roads open to public traffic throughout the country.

Roads are terrestrial communication paths specially designed for the movement of vehicles and pedestrians.

Public roads - roads of public utility intended for the road and pedestrian traffic in order to meet the general road transport requirements of the national economy, the population, the defense of the country. These roads are public property.

National roads - roads that are public property of the state, which provide the main international road links, the connection between the capital of the country and the cities of residence, the municipalities and the objectives of republican importance, as well as the connection between them.

Rugged clothing roads include upgraded roads and cobbled roads.

Upgraded roads are those that have the carriageway covered with one of the following categories of clothing: concrete cement, asphalt, stone-paved carvings and hardened hydrocarbon binders.

Cobble roads are those where the carriageway has one of the following types of construction: pavement of rough stone or boulders, improved gravel or simple paving.

The length of public roads is achieved by summing up public roads, consisting of upgraded roads, cobbled roads and land roads.

Railway is the communication way on tracks, meant exclusively for railroad vehicle use.

Railway lines represent the totality of special constructions composed of one or more railways with afferent installations, meant for goods' and passengers' transport with railroad vehicles. The railway line may be "in operation" or in conservation.

Length of public railway lines in operation includes only the lines opened to carry goods and passengers, where transportation is carried out based on travel IDs or documents accompanying the freight.

The length of the line with parallel ways to which for every direction are built more pairs of ways (double, triple, etc.) is established by measuring one single way.

Inland navigable waterway represents the surface of water – river, lake, stream, canal – which is not part of a sea, which by natural or man-made features is suitable for navigation, first of all for the ships meant for transport on inland waterways. The inland navigable waterway, which constitutes the border between our country and other countries, is included in the length of the way.

The length of streams, rivers, and canals is measured on their median.

Gas pipelines represent the ways, which ensure, in general as a continuous action, the transport of gas between two or more localities.

Length of gas pipelines is determined by summing up the length of all the lines used to supply gas. It does not cover the length of the distribution network which supplies gas to consumers for their households' needs.

Simple length of lines (km) represents the length in one direction of the gauge or the air network for electricity supply (for trolleybuses). The total simple length is calculated by summing up both directions of the double lines with the lines into one direction, including the length of the access lines from depots and return loops.

Length of trolleybus lines of general use in operation includes the effective distance between the axes of the terminus stations, which serve for embarkation, and debarkation of passengers in case of fee-based transportation or loading – unloading of goods from transportation means. The length of trolleybus lines of general use in operation is determined according to the axis of the highway (on the sectors with two or more ways – according to the axis with the smallest length).

Extended length of the line of a single way represents the sum of the length of highways, secondary ways (return) and other ways (lines), ramifications, crossing halts, junction arms, circular ways, and other, regardless of the fact if these lines are of general (passenger) or special use.

Density of communication ways – length of the communication ways in average per square kilometers of the country territory area.

Road vehicle represents a mechanical system which circulates on the roadways to carry goods and/or passenger and provide services or works (military vehicles are excluded).

Registered road vehicles – vehicles that are registered in a registry of road transport vehicles, kept by an official body, regardless of the fact if the registration is accompanied or not by issuance of the registration plate.

Road vehicles for carrying goods – road motor vehicles designed exclusively or primarily to carry goods: *utility vehicles, specialized trucks, motor tractors, motor tow trucks*.

Utility vehicle – car designed to transport goods, without special equipment (trucks, vans); it is a rigid road vehicle designed exclusively or primarily to carry goods.

Specialized motor vehicle – a motor vehicle intended for transportation the goods, with special equipment (tipper, concrete mixer, isothermal tank, refrigeration tank, etc.).

Lorries represent specialized utility vehicles to carry goods, which have special equipment and dump trucks for automated discharge from behind or lateral part of the bodywork of goods transported in bulk. A lorry is a rigid road vehicle meant exclusively or primarily to carry goods.

Motor tractor is a road transport vehicle that does not have its own bodywork, but a coupling system (saddle) meant to haul semi-trailers.

Motor tow truck is the road motor vehicle meant exclusively for hauling vehicles and which has a platform for ballasting.

Road train – road vehicle for carrying goods which is coupled to a trailer; this category includes also an articulated vehicle which has one more trailer attached.

Articulated vehicle – a road tractor coupled to a semi-trailer.

Semi-trailer is the road vehicle for carrying goods, with no front axle, hauled and equipped with a system of joints with pivot and is coupled with the saddle of the road tractor.

Trailer is the road vehicle for carrying goods, which does not have its own propulsion system and which is meant to be hauled by a road motor vehicle. The trailers with one axle and those with loading capacity under 500 kg are excluded, as well as the trailers from agriculture, and living trailers.

Special purpose road vehicles represent the equipped road vehicles from construction with devices that are adequate for their destination (fire brigade vehicles, mobile cranes, ambulances, repair workshop vehicles, lab vehicles, dump vehicles, etc.)

Motor cars for passengers represent the road motor vehicles meant exclusively or primarily to carry one or more persons; including buses, minibuses, and motor cars.

Bus is a motor vehicle for carrying passengers with a capacity of more than 9 (nine) seats, including the seat of the driver.

Minibus is the bus with a transportation capacity of at most 22 passengers on seats, excluding the seat of the driver.

Motor car is the motor vehicle specially built and equipped for carrying persons, luggage and/or their goods, having at most 9 seats, including the driver's seat.

Railway vehicle is the mobile equipment running exclusively on rails: moving either under its own power (tractive vehicles) or hauled by another vehicle (coaches, railcar trailers, vans and wagons).

Locomotive – tractive railway vehicle with a power of at least 110 kW used for hauling the railway wagons. The diesel locomotive: represents a locomotive with the main power source in a diesel engine, regardless of the type of transmission installed.

Passenger wagons: railroad vehicles for passenger transportation joint to one or more railway engines.

Freight wagons: railroad vehicles meant for carrying goods, coupled to one or more railway engines.

Train represents one or more railway vehicles hauled by one or more railway engines, running under a certain number or with a certain destination between the initial fixed point to the destination fixed point. A locomotive that travels all by itself is not considered a train.

Ships for inland navigable waterways – ships meant to carry goods and passengers on inland navigable waterways: ships for transportation of passengers, towboats and pushers, self-propelled ships for goods' transportation, not-propelled ships for transportation of goods, technical ships, and duty ships.

Ships for inland navigable waterways represent the ships, **with or without self-propulsion**, which are built to carry goods on inland navigable waterways and which are registered as such. This category also includes the ships under repair and the ships for transportation on the inland navigable waterways that are also authorized to navigate on sea.

Ships for transportation of passengers – ships meant to carry more than 12 passengers.

Tow boats and pushers – ships meant to haul and/or push ships.

Aircraft – vehicle that moves in air to carry goods and passengers or for other purposes: aircrafts for transportation of passengers and mixed transportation, for transportation of goods, utilities, school, sport, with special destination, helicopters.

3.2.2. Unit of measure

Length and density of communication ways are registered in **km**; number of transportation means: road, railway, river, air transport and trolleybuses are expressed in **units**.

3.2.3. Computation formula

Density of communication ways is calculated as an average measure as a division of the length of communication ways (respectively, public roads, railway lines, internal navigable ways, trolleybus lines) and area of the country's territory or that of the region to which it refers.

3.3. Used classifications

Used classifiers and nomenclatures:

Classifier of Ownership Forms in the Republic of Moldova (CFP - *Casificatorul formelor de proprietate din Republica Moldova, in Romanian*): approved via the Decision of the Standards, Metrology, and Technical Supervision Department No. 276-st dated 04.02.1997;

Classifier of Administrative-Territorial Units of the Republic of Moldova (CUATM - *Clasificatorul unităților administrativ-teritoriale al Republicii Moldova in Romanian*), approved via the Moldova-Standard Decision No. 1398-ST dated 03.09.2003; in force since 03.09.2003.

At the same time, a number of nomenclatures are used for the statistical surveys on transport:

- Nomenclature of motor vehicles types – created from the Registry of Vehicles Registration;
- Nomenclature of public roads categories;
- Nomenclature of railroad gauge types.

3.4. Scope

3.4.1. Sector coverage

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3.4.2. Statistical population

The statistical collectivity for the statistical surveys listed under point 4.1.1. is represented by:

- enterprises of public roads' operation (f.nr.3-drum);
- enterprises of railway transport (f.nr.2-cf Chapter I and II);
- enterprises having river ships (f.nr.6-nav.int. Chapter I and II) ;
- air operators, legal entities involved in civil aircrafts operation (f.nr.3-ac);
- JSC dealing with gas pipelines transport (f.nr.1-conducte);
- enterprises dealing with operation and service of urban electrical transport (f. nr. 1-trol. Chapter I and III);
- vehicles registered in State Registry of Transport Means (based on the data submitted by the

Public Services Agency, in electronic format).
3.4.3. Geographical coverage
Information is developed and disseminated without covering the data of the enterprises and organizations from the left side of the River Nistru and Bender municipality.
3.4.4. Time coverage
Time series are available in NBS publications and web page: Annual series – starting with 2000, except for the data on registered motor vehicles – starting with 2004.
3.5. Disaggregation level
Data resulting from statistical surveys are <u>disaggregated</u> by: <i>Districts, municipalities, economic development</i> regions (Chisinau mun., North, Center, South, ATU Gagauzia) (for length of public roads); <i>Categories of public roads</i> (total roads, including the national and local ones); <i>Types of railway gauge</i> (normal, narrow, and large); <i>Types of vehicles:</i> motor vehicles for transportation of passengers (passenger cars, including taxis, buses, and minibuses); motor vehicles for transportation of goods (lorries, motor tractors, and motor tow trucks); trailers and semitrailers. Data resulting from the statistical surveys listed in point 4.1.1. are disseminated by observing the confidentiality requirements. <u>Used symbols:</u> - the event did not exist; 0,0 small number of cases.
3.6. Dissemination frequency
Annually
3.7. Timeliness
The June month following the year of reference.
3.8. Revision
Data are final when disseminated for the first time.
3.9. Period of reference
The period of reference of the variables collected through these statistical surveys refer to the existing situation as of December 31.

4. Data Collection and Processing
4.1. Data source
4.1.1. Statistical surveys
The exhaustive and annual statistical surveys on communication ways and transportation means are carried out based on the statistical questionnaires: <ul style="list-style-type: none"> - Public roads at the end of the year (<i>f.nr.3-drum</i>); - Railway transport of general use and length of railway lines (<i>f.nr.2-cf</i>); - Internal naval transportation means at the end of the year (<i>f.nr.6 - nav. int.</i>); - Park of civil aircrafts at the end of the year (<i>f.nr.3-ac</i>); - Gas pipelines (<i>f.nr.1-conducte</i>).
4.1.2. Administrative sources
The administrative source for vehicles registered in Moldova is the authority responsible for the Vehicle Registration Registry within the Public Services Agency.

4.1.3. Estimations
Not applicable.
4.2. Characteristics of the statistical survey
4.2.1. Objective and background
<p>The statistical surveys listed in point 4.1.1. have the following objectives:</p> <ul style="list-style-type: none"> - to collect annual data and to create annual databases regarding the transportation means in inventory, registered vehicles, length of public roads and railway lines, and the network of gas pipelines; - to process data and to obtain qualitative statistics; - to ensure information for the database; - to harness the results of the statistical surveys through studies and analyses; <p>Starting in 1999, the statistical tools are re-designed and implemented for statistics referring to railway transport, internal naval and air transport, so as to adjust the statistical development to the European standards.</p> <p>Prior to 1990, the citizens of the country practically did not have lorries and buses, and data regarding the number of motor vehicles were resulting from the exhaustive statistical survey of legal entities, which are carried out until present time, with some adjustments.</p> <p>Starting in 2004, the data regarding the vehicles (number of buses, minibuses, passenger cars, goods road motor vehicles) registered in the country at the end of the calendar year are disseminated.</p>
4.2.2. Statistical unit
See p.3.4.2.
4.2.3. Circle of units covered in the survey
<p>Number of surveyed units according to the statistical surveys:</p> <ul style="list-style-type: none"> - f.nr.3-drum - 1 unit ("State Administration of Roads" SE); - f.nr.2-cf - 1 unit ("Moldova Railroad" SE); - f.nr.6 - nav. int. - 3 units; - f.nr.3-ac - 1 unit (Civil Aviation Authority); - f.nr.1-conducte - 1 unit ("Moldovagaz" JSC).
4.2.4. Survey frequency
Annually
4.2.5. Data collection
<p>The questionnaires of the exhaustive statistical surveys (<i>f.nr.3-drum; f.nr.2-cf; f.nr.6 - nav. int.; f.nr.3-ac; f.nr.1- conducte</i>) are submitted on-line or on paper base by the reporting statistical units in the NBS address and includes data for the surveyed year referring to the main indicators mentioned under point 3.2.1. Data on registered road vehicles are transmitted in electronic format.</p> <p>Period of reference for registration of statistical data refers to the situation as of December 31.</p> <p>Period of registration for the statistical surveys refers to the date following the reported year until:</p> <ul style="list-style-type: none"> f.nr.3-drum - March 5th; f.no.2-cf - April 17th; f.no.6 - nav.int. - February 1st; f.no.3-ac - February 1st; f.no.1-conducte - until the 25th of the month following the reporting period.

4.3. Data processing and compilation
4.3.1. Data validation
Data are verified and analyzed from quality point of view, especially the internal coherence, temporal coherence as well as coherence with other data. The results of the statistical surveys are specified as statistical indicators referring to totals, percentages, and average values. Control methods allow verifying: <ul style="list-style-type: none"> - integrity of the data filled in the questionnaire; - compliance of the identification data; - observance of logical conditions for data correlation.
4.3.2. Compilation/extrapolation of data
Not applicable.
4.3.3. Adjustments
No adjustments are made.
4.3.4. Quality assurance
The quality of statistical data is ensured by observing the fundamental principles of official statistics approved by the UN Economic Commission for Europe in 1992 (and Statistical Commission/UN in 1994), as well as those set forth in the Republic of Moldova Law on Official Statistics. In its activity of producing statistical information, NBS pays huge importance to ensuring high quality of data. In this respect, a number of measures for quality assurance are carried out at every stage of the statistical process: organization of statistical surveys, collection, processing, and development of statistical information. Important efforts are undertaken to ensure the plenitude and quality of data presentation by the respondents included in the statistical surveys. Errors, inconsistencies, and suspicious data are brought to light so as to be verified and corrected. The primary data are verified and analyzed from internal coherence point of view (within the questionnaire), temporal coherence (with data from previous periods), with data of other similar units, as well as with data available from other statistical surveys and administrative data sources. The missing or inconsistent data are imputed, if needed. To ensure the quality of the primary data, meetings (seminars) are organized with respondents for explaining the definitions, the correct way to fill in the questionnaires, especially when they are modified or implemented.
4.4. Data accuracy
4.4.1. Non-response rate
There are no non-responses for the annual surveys mentioned in point 4.1.1.
4.4.2. Sampling errors
No sampling surveys are carried out hence, no sampling error is calculated. The main sources of errors that may occur are the errors from processing and presenting the information received from administrative sources.

5. Comparability and Coherence
5.1. International comparability
International comparability is ensured by using: <ul style="list-style-type: none"> - Glossary for statistics on transport – III edition, 2003, UN and EU; - EU Regulation No. 1172/98 on statistical data in respect of the carriage of goods by road.
5.2. Comparability over the time
Comparability over the time of the main indicators is generally ensured – starting with 2000

5.3. Coherence with other statistics

Coherence with other statistics is ensured by the use of the same classifiers.

6. Institutional Mandate (normative-legal basis)

The NBS activity is based on respecting the Republic of Moldova Constitution, the Law on Official Statistics No. 93 dated 26.05.2017, other legislative and normative acts, NBS management decisions and orders.

The Law on Official Statistics regulates the organization and operation of the unique system of official statistics, establishing the general principles for collecting, processing, centralizing, diminishing, and stocking statistical information (art.1).

Art. 5 of the Law provides that the production of statistical information is based on respecting the following principles: impartiality, objectiveness, relevance, transparency, confidentiality, cost-efficiency etc.

Being the central statistical body, the National Bureau of Statistics is an administrative authority created under the Government for leading and coordinating the activity in the statistics area.

In accordance with Government Decision 935 of 24.09.2018 on the organization and operation of the NBS, the Bureau exercises the following tasks:

- 1) Coordinates the national statistical system on the development and production of official statistics;
- 2) Elaborates and implements strategies for the development of the national statistical system, annual and multiannual statistical programs;
- 3) Elaborates the normative and institutional framework necessary for the achievement of the strategic objectives in its field of activity, as well as the mechanisms for their implementation in practice;
- 4) Performs the management and control of the achievement in quality conditions of the programs and statistical plans adopted at central and regional level;
- 5) Harmonizes and aligns national statistical indicators, methodologies, methods and techniques with international regulations and standards;
- 6) Promotes the statistical culture in the society.

The legislative and normative acts ruling the activity of the NBS are available on its official page www.statistica.md , under About NBS (<http://www.statistica.md/pageview.php?l=en&idc=323&>)

7. Confidentiality

7.1. Principles

According to art. 19 of the Law on Official Statistics No. 93 dated 26.05.2017, producers of official statistics shall take all regulatory, administrative, technical and organizational measures to protect confidential data and prevent their disclosure.

Chapter VII of the above-mentioned law stipulates that the data collected, processed and stored for the production of statistical information are confidential if they allow the direct or indirect identification of the respondents.) The following shall not be considered confidential:

- a) data that can be obtained from publicly accessible sources according to the legislation;
- b) individual data on address, telephone, name, type of activity, number of employees of legal entities and individual entrepreneurs;
- c) data referring to public enterprises, institutions and organizations funded from the budget, submitted at the request of the public administration authorities.

According to the Law on Official Statistics, art. 20, access to confidential information is granted to the persons who, according to their official functions, participate in the production of statistical information shall have access to individual data in so far as individual data are necessary for producing this information.

The same article stipulates that the access to individual data, which do not allow the direct identification

of respondents, may be given for scientific survey projects, whose expected results do not refer to identifiable individual units, under the regulation approved by the central statistical authority.

Art. 23 (5) of the Law stipulates that the the statistical information cannot be disseminated to users if it refers to 1-3 statistical units.

7.2. Practical assurance of the confidentiality rules

To ensure the protection of confidential statistical data in compliance with the Law on Official Statistics No. 93 dated 26.05.2017, the National Bureau of Statistics undertakes all the regulatory, administrative, technical, and organizational measures to protect the confidential statistical information and prevent its disclosure.

In compliance with the above-mentioned law, the employees of producers of official statistics, including temporary employees who, according to their official functions, have direct access to individual data shall be obliged to observe the confidentiality of these data during and after termination of employment.

Before being disseminated, the statistical data are verified if they meet the protection requirements set for confidential data. If the statistical data contain confidential information (see p. 7.1), they are not disseminated, but aggregated at the minimum available level which ensures the protection of data confidentiality.

8. Access to Information and Dissemination Format

8.1. Access to information

8.1.1. Calendar of statistical publications

Annually the Advance release calendar is developed by NBS.

8.1.2. Access to the calendar of statistical publications

The press release calendar is posted on the NBS official page www.statistica.md.

8.1.3. Access to statistical data

According to the Law on Official Statistics No. 93 dated 26.05.2017, art. 23:

- a) Producers of official statistics shall be obliged to disseminate the statistical information within the deadlines specified in the programme of statistical works and in the press-release calendar.
- b) The dissemination of statistical information laid down in the programme of statistical works to all categories of users shall be made free of charge and under equal access conditions in terms of volume, quality and time of dissemination

The program of statistical work may be accessed on the web page www.statistica.md, under About NBS / legislative and normative acts (<http://www.statistica.md/pageview.php?l=en&idc=323&>)

The NBS web page www.statistica.md represents the most important information source for ensuring users' access to different statistical information and transparency about the NBS activity.

All the operative information, informative notes, time series, as well as the statistical publications developed by NBS are placed on its official web page.

8.2. Dissemination format

8.2.1. Operative information / Analytical notes

The operative information and analytical notes are published on the official page of NBS: <http://www.statistica.md> under Press Releases, according to the Press Release Calendar.

8.2.2. Publications

Data are disseminated through the NBS database and publications: Statistical Yearbook and Statistical pocket-book.

Access to publications:

- in electronic format, on NBS official page www.statistica.md, under Products and services / Publications <http://www.statistica.md/pageview.php?l=en&idc=350&nod=1&>
- or may be procured at the NBS office (more details at the address www.statistica.md, under Products and services / Publications

<http://www.statistica.md/pageview.php?l=en&idc=350&id=2219>)

8.2.3. Databases/time series

- **Statistical databank** <http://statbank.statistica.md> , under *Economic statistics / Transport / Transport means inventory*

- **NBS official page:** <http://www.statistica.md> under:

- *Press Releases*
- *Statistics by themes / Economic statistics / Transport*
- *Products and Services / Publications.*

8.2.4. Questionnaires/data sent upon request from international organizations

International questionnaires:

annual – World Roads Statistics, International Road Federation;

annual – Common Questionnaire of Transport Statistics, International Transport Forum;

monthly – EEC/UN monthly questionnaire.

8.2.5. Requests for additional data

NBS makes available for users additional statistical information beyond the data presented in the statistical publications, informative notes, operative information, as well as the data placed on the official web page in the limits of available information, in line with the Law on Official Statistics. Request can be sent personally, by post, by e-mail moldstat@statistica.gov.md or via online web form – www.statistica.md heading Products and services / Statistical data request http://www.statistica.md/solicitare_informatii_statistice.php?l=en

9. Useful References (links)

9.1. Accessibility of documentation on methodology

The methodology is available on the official page www.statistica.md , under Metadata (<http://www.statistica.md/pageview.php?l=en&idc=351&nod=1&>).

9.2. Accessibility of documentation on Evaluation Reports

The NBS assessment reports are available on the official page www.statistica.md , under About NBS / Assessments and Opinions on NBS / Assessment Reports (<http://www.statistica.md/pageview.php?l=en&idc=399&id=2739>).

9.3. Accessibility of information on user surveys

User surveys are available on the official page www.statistica.md , under About NBS / Assessments and Opinions on NBS / User Surveys (<http://www.statistica.md/pageview.php?l=en&idc=399&id=2740>).

9.4. Other useful references

EUROSTAT database	http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database
UN Economic Commission for Europe database	http://w3.unece.org/pxweb/Dialog/
International Road Federation database	
International Transport Forum database	